DOCKET: CU-4426

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Takao SUZUKI et al.

TITLE: COMBINED OIL RING

AMENDED CLAIMS

1-7. (cancelled)

8. (new) A combined oil ring comprising:

an oil ring formed into cross-section substantially of an I-shape that two rails are connected at a columnar portion thereof; and a coil expander, which is placed in an inner peripheral groove formed on the inner side of a periphery of the columnar portion connecting the two rails of the oil ring, and which presses the oil ring radially outward,

wherein the coil expander is formed of a shape memory alloy, and is formed of anomaly wire having rectangular cross sectional shape.

9. (new) The combined oil ring according to claim 8, wherein the coil expander formed of the shape memory alloy is treated such that if a temperature of the coil expander itself is higher than a martensitic transformation temperature of the shape memory alloy, the coil expander extends in its longitudinal direction.

10. (new) The combined oil ring according to claim 8, wherein a ratio of a thickness and a width of the cross sectional shape of the anomaly wire, which forms the coil expander, is in a range of 1:1 to 1:4.

11. (new) The combined oil ring according to claim 9, wherein a ratio of a thickness and a width of the cross sectional shape of the anomaly wire, which forms the coil expander, is in a range of 1:1 to 1:4.

12. (new) A combined oil ring comprising:

an oil ring formed into cross-section substantially of an I-shape that two rails are connected at a columnar portion thereof; and a coil expander, which is placed in an inner peripheral groove formed on the inner side of a periphery of the columnar portion connecting the two rails of the oil ring, and which presses the oil ring radially outward,

wherein a width of the oil ring in an axial direction is in a range of 0.3 mm to 3 mm,

the coil expander is formed of a shape memory alloy, and

the coil expander is treated such that if a temperature of the coil expander itself is higher than a martensitic transformation temperature of the shape memory alloy, the coil expander extends in its longitudinal direction.

13. (new) The combined oil ring according to claim 12, wherein the width of the oil ring in the axial direction is in a range of 1.0 mm to 3.0 mm.

14. (new) The combined oil ring according to claim 12, wherein the coil expander, which is formed of the shape memory alloy, is formed by using an anomaly wire.

15. (new) The combined oil ring according to claim 13, wherein the coil expander, which is formed of the shape memory alloy, is formed by using an anomaly wire.

16. (new) The combined oil ring according to claim 14, wherein a ratio of a thickness and a width of the cross sectional shape of the anomaly wire, which forms the coil expander, is in a range of 1:1 to 1:4.

17. (new) The combined oil ring according to claim 15, wherein a ratio of a thickness and a width of the cross sectional shape of the anomaly wire, which forms the coil expander, is in a range of 1:1 to 1:4.